

feet more, higher up, consist of massive sandstones and heavy beds of shale alternating. Just overlying the upper conglomeratic sandstone plate are variegated clay slates.

It is impossible not to see the significance of the immense development of sandrocks and pebble rocks, in the Ocoee and Chilhowee systems, underlying the Lower Silurian Dolomites, and hugging the flank of the backbone of the Continent, for a thousand miles through Virginia, North Carolina, Tennessee and Georgia, as in New Jersey and New York. It is a shore deposit on an immense scale, in a shallow sea, with a steeply inclined margin, and an Alpine range inland. No glaciers; for the conglomerates consist of rolled shingle stones; but torrents, innumerable and vehement. No large rivers; for no delta deposits of any size are apparent. A rapid degradation of the mountains was followed or stopped by a partial submergence, which deepened the sea, made the sand deposits finer, and permitted the deposit of the Lower Silurian limestones.

The reason therefore why the massive Quebec Group (Potsdam, Chilhowee and Ocoee) formation does not come up to daylight in the faults which break the middle and northwestern parts of the floor of the region under discussion, is because it thins away rapidly seaward, that is, westward, towards the Coal Area. And in this it only sets an example afterwards followed by the sandstone and conglomerate members of the great Palæozoic system: Nos. IV, IX, X, and XII the Millstone Grit.

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*Stated Meeting, July 19, 1872.*

Present, five members.

Mr. ELI K. PRICE, in the Chair.

A photograph for the Album was received from Prof. Thomas Chase, of Haverford, Pa.

Letters acknowledging receipt of publications were received from the Royal Society, London (86, 87). The Royal Saxon Society (86); the Zoologico-Botanical Society, Vienna (Vols. 8 to 11 Proc., and Trans. Vols. XII, XIII, XIV, i, ii, with a request to have the set completed. On motion, referred to the Librarian); and from Dr. Hornstein, Prag. (86).

Letters of envoy were received from the Observatorio de Marina de S. Fernando, and the Physico-Medical Society in Erlangen.

Donations for the Library were received from the Belgian Academy, French Geographical Society, Italian Geological Commission, London Chemical, Geological, Asiatic and Antiquarian Societies, Meteorological Office, Nature, Old and New, Dr. Samuel Green, Silliman's Journal, American Chemist, Philadelphia Academy of Natural Sciences, Franklin Institute, Penn Monthly, American Journal of the Medical Sciences, Medical News, Baltimore Peabody Institute, Washington Philosophical Society, and Petroleum Monthly.

A paper entitled "On the Tertiary Coal and Fossils of Osino, Nevada," by Prof. Cope, was referred to the Secretaries.

Prof. Chase read a paper on "Ætherial Oscillation, the Primordial Force," and stated that certain of his predictions had been verified, which were based on his observations of the rainfall at San Francisco.

Pending nominations, Nos. 693 to 697, and new nomination, No. 698, were read.

Nominations, 693 to 696, were balloted for, and the following persons declared duly elected members of the Society:

Rev. Starr Hoyt Nichols, of Philadelphia.

Mr. Coleman Sellers, of Philadelphia.

Dr. Robert Peter, of Lexington, Kentucky.

Dr. Richard J. Lewis, of Philadelphia.

And the meeting was adjourned.

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*Stated Meeting, August 15, 1872.*

Letters of acceptance was received from Dr. Robert Peter, dated Lexington, Ky., August 8th, and Mr. F. B. Miller, dated Royal Mint, Melbourne, May 6th, 1872.

Letters acknowledging receipt of publications were received from Mr. Peter Turner, dated Leoben, Oct. 12, 1871